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**Contribution to the knowledge of the  
*Seladonia* ROBERTSON and *Vestitohalictus* BLÜTHGEN  
(Hymenoptera: Halictidae: *Halictus* LATREILLE)  
of European part of Russia**

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**A b s t r a c t :** As a supplement to a previously published study on Russian *Halictus* species, we here report further records of 17 rarely collected and little known species of subgenera *Seladonia* and *Vestitohalictus* from European part of Russia. Forty eight *Halictus* species are currently known from Russia, including *H. (Vestitohalictus) radoszkovskii* (VACHAL, 1902), which is reported from Russia for the first time.

**K e y   w o r d s :** bees, fauna, biodiversity, Apoidea, Anthophila, Palaearctic Region.

### Introduction

The genus *Halictus* LATREILLE is mostly Palaearctic in occurrence and includes 192 currently recognized species from 15 subgenera (MICHENER 2007; PESENKO 2007).

Russia stretches over a vast expanse of Eurasia between the Baltic Sea in the west and the Pacific Ocean in the East. The European part of Russia comprises 57 administrative units covering about 4.3 million km<sup>2</sup> (about 25% of the total area of Russia). In the east, the European part of Russia is delimited by the Ural Mountains and in the south it is defined by the border with Kazakhstan.

Some faunistic studies on this genus in the European part of Russia have been made by MORAWITZ 1869, 1874; STRAND 1909; NIKIFORUK 1957; ELFVING 1968; PESENKO 1972, 1984, 1985, 1986, 2006, 2007; OSYTSCHNJK et al. 1978; WARNCKE 1982; SITDIKOV 1986; EBMER 1988a; BLAGOVESHCHENSKAYA & POPOVA 1994; ANAN'YEVA & KOCHETKOV 1999; RUCHIN & SHIBAYEV 2008; SHIBAEV & POLUMORDVINOV 2012; PROSHCHALYKIN & ASTAFUROVA 2012, 2016; LEVCHENKO & YUFEREV 2013; LEVCHENKO 2014.

In the present study we report additional records of 17 species and subspecies (*Seladonia* – 10, *Vestitohalictus* – 7) with one species recorded from Russia for the first time bringing the total number of species of *Halictus* known from this country to 48.

## Materials and Methods

The results presented in this paper are based on about 1300 specimens mainly collected in the last few decades by entomologists in the European part of Russia, that are currently housed in the Zoological Institute Russian Academy of Sciences (St Petersburg, Russia) and V.I. Vernadsky Crimean Federal University (Simferopol, Russia). Hard brackets are used when information is added to specimen label information (e.g. current name of an old place name). The distribution of *Halictus* follows P. BLÜTHGEN (1955), A. EBMER (1975, 1988a, b, 2005), K. WARNCKE (1982), Yu. PESENKO (2007) and PESENKO et al. (2000). New distribution records are marked with an asterisk (\*).

## Results

### Genus *Halictus* LATREILLE, 1804

#### Subgenus *Seladonia* ROBERTSON, 1918

##### *Halictus (Seladonia) cephalicus* MORAWITZ, 1874

Material examined: Crimea Rep.: Kholmy, 10.VII.1904, D. Glazunov, 3♂♂; Artek, 13.VIII.2003, S. Ivanov, ♀.

Published records: MORAWITZ 1874: 173 (Dagestan Rep.); STRAND 1909: 5 (Crimea Rep.); OSYTSHNIUK et al. 1978: 387 (south of European part, as *Halictus varipes* MORAWITZ); WARNCKE 1982: 135 (Rostov Prov.); PROSHCHALYKIN & ASTAFUROVA 2016: 10 (European part).

Distribution: Russia (Rostov Prov., Dagestan Rep., Crimea Rep.). – South-eastern Europe, Caucasus, Turkey, Syria, Israel, Iran, Iraq, Afghanistan.

##### *Halictus (Seladonia) confusus* ssp. *perkinsi* BLÜTHGEN, 1926

Material examined (73♀♀, 30♂♂): Kaliningrad Prov.: Khrabrovo; Leningradskaya Prov.: Tolmachevo, Pushkin, Sosnovo, Luga, Pavlovsk, Koltushi, Lebyazhye; Belgorod Prov.: Borisovka; Kursk Prov.: Kursk, Borisovka; Moscow Prov.: Zvenigorod; Voronezh Prov.: Ternovka, Ramon'; Urozhaynoye; Ulyanovsk Prov.: Ulyanovsk; Astrakhan Prov.: Astrakhan; Volgograd Prov.: Bakalda; Krasnodar Terr.: Sochi, Lazarevskoe; Krasnaya Polyana; Dagestan Rep.: 30 km NE Rutul; Karachaevo-Cherkesk Rep.: Teberda; Crimea Rep.: Yalta; Perm Prov.: Kishert'; Chelyabinsk Prov.: Ilmen Nature Reserve;

Published records: NIKIFORUK 1957: 147 (Bashkortostan Rep.); ELFVING 1968: 23 (Karelia, Leningradskaya Prov.); OSYTSHNIUK et al. 1978: 387 (European part, as *Halictus perkinsi*); SITDIKOV 1986: 104 (Udmurtia Rep.); EBMER 1988a: 369, map 10 (Rostov Prov., Tatarstan Rep., Bashkortostan Rep.); BLAGOVESHCHENSKAYA & POPOVA 1994: 101 (Ulyanovsk Prov.); LEVCHENKO & YUFEREV 2013: 105 (Kirov Prov.); LEVCHENKO 2014: 28 (Moscow Prov.).

Distribution: Russia (north to Karelia, east to Ural). – Europe (north to England, Sweden and Finland), Georgia, Turkey, Kazakhstan.

***Halictus (Seladonia) gavarnicus* PÉREZ, 1903**

**M a t e r i a l e x a m i n e d :** Krasnodar Terr.: Sochi, Lazarevskoe, 24.V.1973, V. Tobias, ♀; Goryachiy Klyuch distr., Suzdalskaya, 7.VIII.2011, Yu. Astafurova, ♀; Stavropol Terr.: Shpakovskoye, 10.VII.1988, S. Belokobylskij, ♀; Crimea Rep.: Gurzuf, 15.V.1983, Zagulyaev, 2♀ ♀; Ai-Petri mountain pasture, 20.VII.2003, S. Ivanov, ♀; Sevastopol distr., 16.VII.1989, S. Ivanov, ♀; Chelyabinsk Prov.: Trotsky Nature Reserve, 8.V.1977, Kaygorodova, ♀.

**P u b l i s h e d r e c o r d s :** EBMER 1988a: 371 (Crimea Rep., Karachaevo-Cherkesk Rep., Bashkortostan Rep.); KUZNETSOVA 1990: 41 (Lipetsk Prov., as *Halictus tataricus* BLÜTHGEN); PROSHCHALYKIN & ASTAFUROVA 2012: 98 (Crimea Rep., as *Seladonia garvanica tatarica*).

**D i s t r i b u t i o n :** Russia (steppe zone, east to Far East). – Europe (north to S Germany), Caucasus, Turkey, Mongolia, North China.

***Halictus (Seladonia) kessleri* BRAMSON, 1879**

**M a t e r i a l e x a m i n e d (143♀ ♀, 80♂ ♂):** Kursk Prov.: Borisovka; Ulyanovsk Prov.: Ulyanovsk; Voronezh Prov.: Ramon'; Saratov Prov.: 20 km SW Balakovo; Belgorod Prov.: Borisovka; Rostov Prov.: Kovrino; Persiyanova, Rostov-na-Donu; Volgograd Prov.: Sarepta[Volgograd]; Krasnodar Terr.: Varenikovskaya; Stavropol Terr.: Pertovskoye, Shkotovskoe; 15 km W Stavropol; Sengileyevskoye; Crimea Rep.: Krasnoleseye, Kerch, Belbek, Karadag, Kholmy, Sevastopol, Alushta, Muchalatka, Artek, Simferopol, Yalta, Mezhvodnoe, Izobilnoye, Urozhaynoe, Sudak, Zolotoe; Orenburg Prov.: 20 km S Sagarchin.

**P u b l i s h e d r e c o r d s :** PESENKO 1972: 293 (Rostov Prov.); OSYTSCHNIUK et al. 1978: 386 (south of European part); EBMER 1988a: 353, map 6 (Crimea Rep., Krasnodar Terr., Rostov Prov., Bashkortostan Rep.); KUZNETSOVA 1990: 42 (Lipetsk Prov.); PROSHCHALYKIN & ASTAFUROVA 2012: 98 (Crimea Rep.).

**D i s t r i b u t i o n :** Russia (steppe zone, north to Lipetsk Prov. and east to South Ural). – South Europe (to eastern Austria in the north), Caucasus, Turkey.

***Halictus (Seladonia) leucaheneus* ssp. *arenosus* (EBMER, 1976)**

**M a t e r i a l e x a m i n e d (38♀ ♀, 10♂ ♂):** Leningradskaya Prov.: Luga, St Petersburg; Kursk Prov.: Borisovka, Kursk; L'gov; Voronezh Prov.: Ternovka, Ramon'; Yaroslavl Prov.: Yaroslavl; Kostroma Prov.: Kostroma; Udmurtia Rep.: Izhevsk; Belgorod Prov.: Borisovka; Perm Prov.: Kishert'; Chelyabinsk Prov.: Troitsky Nature Reserve.

**P u b l i s h e d r e c o r d s :** SITDIKOV 1986: 104 (Udmurtia Rep., as *Halictus fasciatus*); EBMER 1988a: 361, 362, map 8 (Tatarstan Rep., Bashkortostan Rep.); KUZNETSOVA 1990: 42 (Lipetsk Prov., as *Halictus fasciatus*); BLAGOVESHCHENSKAYA & POPOVA 1994: 101 (Ulyanovsk Prov., as *Halictus fasciatus*); LEVCHENKO & YUFEREV 2013: 105 (Kirov Prov.); LEVCHENKO 2014: 28 (Moscow Prov.); PROSHCHALYKIN & ASTAFUROVA 2012: 98 (Crimea Rep., as *Seladonia leucahenea arenosa*).

**D i s t r i b u t i o n :** Russia (north to Leningradskaya Prov., east to Bashkortostan Rep.). – Europe (north to 57° N) (ssp. *leucahenea* (EBMER, 1972) – Eastern Asia from Balkhash Lake to Manchuria; ssp. *occipitalis* (EBMER, 1972) – Turkey, Caucasus).

***Halictus (Seladonia) seladonius* (FABRICIUS, 1794)**

**M a t e r i a l e x a m i n e d :** Saratov Prov.: Urbakh, 24-27.VII.1926, A. Shestakov, 4♂ ♂; Rostov Prov.: Persiyanova, 50 km NE Rostov-na-Donu, 18.VII.1971, Yu. Pesenko, ♀; Orenburg Prov.: Shelkar-Yega-Kara Lake, 12.VIII.2004, E. Narchuk, 3♂ ♂; Zhetykol' Lake, 25 km NNE Svetlyi, 10-12.VIII.2004, V. Krivokhatskiy, 3♂ ♂; 10 km NE Svetlyi, 8-10.VIII.2004, V. Krivokhatskiy, ♀, 3♂ ♂.

P u b l i s h e d r e c o r d s : NIKIFORUK 1957: 147 (Bashkortostan Rep., as *Halictus geminatus*); EBMER 1988a: 340, map 1 (Volgograd Prov., Bashkortostan Rep.); BLAGOVESHCHENSKAYA & POPOVA 1994: 102 (Ulyanovsk Prov., as *Halictus geminatus* PÉREZ).

D i s t r i b u t i o n : Russia (south of European part, Altai). – Europe (to southern Switzerland, Austria, Hungary and Slovakia in the north), Caucasus, Turkey, Israel, Iran, Afghanistan, Turkmenistan.

***Halictus (Seladonia) semitectus* MORAWITZ, 1874**

M a t e r i a l e x a m i n e d : Crimea Rep.: Yalta, 17.VI.1952, V. Popov, ♀; Volgograd Prov.: Sarepta[Volgograd], 13.VII.1906, Wolmann, ♀; 18 km NNE Kalach-na-Donu, 10-13.VII.2015, M. Proshchalykin, 2♀ ♀; Voronezh Prov.: Varvarino, Khoper Nature Reserve, 8.VII.1977, V. Tobias, 2♀ ♀, 7♂ ♂; Kursk Prov.: L'gov, 24.VIII.1954, Negrobov, 3♂ ♂; Saratov Prov.: Dyakovka, 25.V.1986, D. Kasparyan, 4♀ ♀; Kalmykia Rep.: 10 km SEE Ketchenery, 13-14.VII.2015, M. Proshchalykin, ♀; 17 km SEE Artezian, Kuma River, 18-21.VII.2015, M. Proshchalykin, ♂; Dagestan Rep.: Kumgar-Kale, 11.VII.1960, E. Sugonyaev, ♀, 4♂ ♂; Botlikh, near Tlokh, 10.V.1988, Kh. Aliyev, ♀.

P u b l i s h e d r e c o r d s : MORAWITZ 1874: 172 (Dagestan Rep.); PESENKO 1972: 293 (Rostov Prov.); 2006: 77 (south of European Russia, south Ural); OSYTSCHNIUK et al. 1978: 386 (European part); EBMER 1988a: 351, map 4 (Rostov Prov.); KUZNETSOVA 1990: 42 (Lipetsk Prov.).

D i s t r i b u t i o n : Russia (steppe and forest-steppe zones, east to Far East). – Europe (north to Lithuania), Armenia, Afghanistan, Mongolia, NW and NC China.

***Halictus (Seladonia) subauratus* ssp. *subauratus* (ROSSI, 1792)**

M a t e r i a l e x a m i n e d (151♀ ♀, 17♂ ♂): Kaliningrad Prov.: Khrabrovo; Voronezh Prov.: Voronezh; Ulyanovsk Prov.: Vayzovka; Belgorod Prov.: Borisovka; Grayvoron; Kursk Prov.: Borisovka; Rostov Prov.: Kamenka, Persiyanovka, Bagaevskiy, Rostov-na-Donu; Astrakhan Prov.: Zyuzno; Dosang; 35 km NNW Astrakhan; 13 km S Liman; Kalmykia Rep.: 22 km E Yashkul; Adygea Rep.: Maykop; Krasnodar Terr.: Slavyanskaya; Sochi, Lazarevskoe; Suzdalskaya (15 km NE Goryachiy Klyuch); Stavropol Terr.: Shpakovskoye; Kislovodsk; Kabardino-Balkarskaya Rep.: 5 km N Baksan; Dagestan Rep.: Manaskent; Severnaya Osetia Rep.: Alagir; Crimea Rep.: Kholmy; Sevastopol; Sudak; Muchalatka, Alupka, Artek, Simferopol, Yalta; Orenburg Prov.: 10 km NE Svetlyi; Spassk.

P u b l i s h e d r e c o r d s : MORAWITZ 1874: 170 (Dagestan Rep., as *H. meridionalis* Morawitz); NIKIFORUK 1957: 148 (Bashkortostan Rep.); PESENKO 1972: 293 (Rostov Prov.); OSYTSCHNIUK et al. 1978: 385 (European part); DATHE 1980: 210 (Karachaevo-Cherkesk Rep.); SITDIKOV 1986: 104 (Udmurtia Rep.); EBMER 1988a: 343, map 2 (Moscow Prov.); Dagestan Rep., Krasnodar Terr., Karachaevo-Cherkesk Rep., Crimea Rep., Bashkortostan Rep.; BLAGOVESHCHENSKAYA & POPOVA 1994: 102 (Ulyanovsk Prov.); ANAN'YEVA & KOCHETKOV 1999: 8 (Ryazan Prov.); RUCHIN & SHIBAYEV 2008: 337 (Mordovia Prov.); LEVCHENKO & YUFEREV 2013: 105 (Kirov Prov.); LEVCHENKO 2014: 28 (Moscow Prov.); PROSHCHALYKIN & ASTAFUROVA 2012: 98 (Crimea Rep., as *Seladonia subaurata*); 2016: 12 (Dagestan Rep., as *Seladonia subaurata*).

D i s t r i b u t i o n : Russia (north to Moscow and Kirov Prov., east to Altai). – Europe (nearly throughout to 57° N in the north), N Africa, Caucasus, Turkey, Israel, Iran, Central Asia, Pakistan, N India, NW China (NIU et al. 2004) (ssp. *corsa* (BLÜTHGEN, 1933) – Corsica, Sardinia).

***Halictus (Seladonia) submediterraneus (PAULY, 2015)***

**M a t e r i a l e x a m i n e d** (46♀ ♀, 36♂ ♂): Volgograd Prov.: Bakalda; Sarepta[Volgograd], Elton Lake; Astrakhan Prov.: Kharabali; Kalmykia Rep.: 10 km SEE Ketchenery; Rostov Prov.: Persyanovka; Dagestan Rep.: Manaskent; Kabardino-Balkarskaya Rep.: 5 km N Baksan; Crimea Rep.: Evpatoriya; Kholmy; Sudak; Muchalatka; Karadag; Sevastopol; Artik; Orenburg Prov.: 10 km NE Svetlyi.

**P u b l i s h e d r e c o r d s**: NIKIFORUK 1957: 148 (Bashkortostan Rep., as *Halictus smaragdulus* VACHAL); EBMER 1988a: 349, map 3 (Crimea Rep., Bashkortostan Rep., as *H. smaragdulus*); PAULY et al. 2015 (Crimea Rep.).

**D i s t r i b u t i o n**: Russia (south of European part, South Ural). – Europe (north to Germany), Turkey, Iran (PAULY et al. 2015).

***Halictus (Seladonia) tumulorum ssp. tumulorum (LINNAEUS, 1758)***

**M a t e r i a l e x a m i n e d** (95♀ ♀, 73♂ ♂): Leningradskaya Prov.: Peterodvoretz; Sosnovo; Tolmachevo; Luga, Pushkin; Pavlovsk; Pargolovo, St Petersburg; Koltushi; Komi Rep.: Sokolovka; Kursk Prov.: Kursk; Nizhegorodskaya Prov.: Volchikha; Ryazan Prov.: Gremyachka; Yaroslavl Prov.: Bereditsyno; Udmurtia Rep.: Russkiy Kuyum; Izhevsk; Rostov Prov.: Persyanovka; Bagaevskiy; Rostov-na-Donu; Krasnodar Terr.: Krasnaya Polyana; Sochi; Adygea Rep.: Maykop; Stavropol Terr.: Vysokoe; Crimea Rep.: Sokolinoye; Kara-Dagh; Generalskoye; Perm Prov.: Kishert'; Chelyabinsk Prov.: Ilmen Nature Reserve; Troitsky Nature Reserve.

**P u b l i s h e d r e c o r d s**: MORAWITZ 1869: 21 (Leningradskaya Prov.); 1874: 170 (Dagestan Rep., as *Halictus flavipes* FABRICIUS); NIKIFORUK 1957: 148 (Bashkortostan Rep.); ELFVING 1968: 28 (Karelia, Leningradskaya Prov.); PESENKO 1972: 293 (Rostov Prov.); SEDYKH 1974: 159 (Komi Rep.); OSYTSCHNIK et al. 1978: 387 (European part); DATHE 1980: 210 (Karachaevo-Cherkesk Rep.); SITDIKOV 1986: 104 (Udmurtia Rep.); EBMER 1988a: 365, map 10 (Crimea Rep., Moscow Prov., Rostov Prov., Tatarstan Rep., Bashkortostan Rep.); KUZNETSOVA 1990: 42 (Lipetsk Prov.); BLAGOVESHCHENSKAYA & POPOVA 1994: 102 (Ulyanovsk Prov.); RUCHIN & SHIBAYEV 2008: 337 (Mordovia Rep.); ANAN'YEVA & KOCHETKOV 1999: 8 (Ryazan Prov.); SHIBAEV & POLUMORDVINOV 2012: 276 (Penza Prov.); LEVCHENKO & YUFEREV 2013: 105 (Kirov Prov.); LEVCHENKO 2014: 29 (Moscow Prov.).

**D i s t r i b u t i o n**: Russia (north to Karelia and east to Altai). – Europe (north to 67° N), Caucasus, Turkey, Syria, Israel, Iran, Central Asia (ssp. *ferripennis* (COCKERELL, 1929) – Eastern Palaearctic Region; spp. *oros* (EBMER, 1988) – mountains of southern Greece; spp. *kyrrnos* (EBMER, 1988) – Corsica).

**Subgenus *Vestitohalictus* BLÜTHGEN, 1961*****Halictus (Vestitohalictus) mucoreus (EVERSMANN, 1852)***

**M a t e r i a l e x a m i n e d**: Astrakhan Prov.: 13 km S Liman, 24-26.VII.2015, M. Proshchalykin, 3♀ ♀, ♂; Kalmykia Rep.: 22 km E Yashkul, 16-18.2015, M. Proshchalykin, ♂; 17 km SWW Artezian, Kuma River, 18-21.VII.2015, M. Proshchalykin, 6♀ ♀, ♂; 3 km SSE Tsagan-Nur, 13.VII.2015, M. Proshchalykin, 2♀ ♀.

**P u b l i s h e d r e c o r d s**: EVERSMANN 1852: 44 (Orenburg Prov.); MORAWITZ 1874: 168 (Dagestan Rep.); EBMER 1975: 162 (Orenburg Prov.); OSYTSCHNIK et al. 1978: 385 (south of European part); PROSHCHALYKIN & ASTAFUROVA 2016: 5 (Dagestan Rep., Orenburg Prov.).

**D i s t r i b u t i o n**: Russia (Astrakhan Prov., Kalmykia Rep., Dagestan Rep., Orenburg Prov.). – Georgia, Iran, Afghanistan, Central Asia, Kazakhstan.

***Halictus (Vestitohalictus) pollinosus* ssp. *cariniventris* MORAWITZ, 1876**

**M a t e r i a l e x a m i n e d** (64♀♀, 53♂♂): Saratov Prov.: Ozinki; 12 km E Engel's; Rostov Prov.: Bagaevskiy; Tarkhankut; 60 km E Rostov-on-Don; Persyanovka; Volgograd Prov.: Sarepta[Volgograd]; Bakalda; Nizhnayay Bannovka; Astrakhan Prov.: Baskunchak Lake; 60 km N Astrakhan; Kharabali; Baskunchak Lake; Dosang; Volzhskiy; 13 km S Liman; Kalmykia Rep.: 17 km SSW Artezian; 10 km SEE Ketchenery; 10 km NNE Lagan; Dagestan Rep.: Manaskent; 9 km SSE Kochubey; Crimea Rep.: Kholmy, Mezhvodnoye; Donvuzlav Lake; Simferopol; Sevastopol; Sudak; Perekop.

**P u b l i s h e d r e c o r d s**: NIKIFORUK 1957: 147 (Bashkortostan Rep.); OSYTSHNJUK et al. 1978: 385 (European part, as *Halictus pollinosus* SICHEL); KUZNETSOVA 1990: 42 (Lipetsk Prov.); PESENKO 2006: 66 (European part).

**D i s t r i b u t i o n**: Russia (south of European part, South Ural). – Southern Europe, Israel, Turkey, Iran, Afghanistan, Pakistan, Central Asia, Mongolia, NW, NC China (ssp. *pollinosa* (SICHEL, 1860) – Sicily, Sardinia, Corsica; ssp. *thesea* (EBMER, 1975) – Crete; ssp. *thevestensis* (PÉREZ, 1903) – North Africa).

***Halictus (Vestitohalictus) pseudomucoreus* EBMER, 1975**

**M a t e r i a l e x a m i n e d**: Astrakhan Prov.: Kharabali, 18-21.VI.2004, S. Belokobylskij, 2♂♂; Dosang, 24.VII.2004, A. Khalaim, ♀; Volzhskiy, 27.V.2016, Yu. Astafurova, ♀; Rostov Prov.: 60 km E Rostov-na-Donu, 7.VIII.1970, Yu. Pesenko, 3♂♂.

**P u b l i s h e d r e c o r d s**: PESENKO 1972: 293 (Rostov Prov., as *H. mucoreus*); EBMER 1975: 163 (Volgograd Prov.); WARNCKE 1982: 139 (Rostov Prov., as *H. mucoreus* ssp. *pseudomucoreus*).

**D i s t r i b u t i o n**: Russia (Astrakhan Prov., Volgograd Prov., Rostov Prov.). – Azerbaijan, Turkey, Turkmenistan, Kazakhstan, NW China.

***Halictus (Vestitohalictus) pulvereus* MORAWITZ, 1874**

**M a t e r i a l e x a m i n e d** (56♀♀, 9♂♂): Astrakhan Prov.: Kharabali; Baskunchak Lake; 10 km S Liman; Kalmykia Rep.: 17 km SSW Artezian; Komsomolskiy; 22 km E Yashkul'; 23 km SEE Khulkhuta; 4 km NE Yashkul'; Crimea Rep.: Perekop; Mezhvodnoye; Sudak.

**P u b l i s h e d r e c o r d s**: MORAWITZ 1874: 168 (Dagestan Rep.); OSYTSHNJUK et al. 1978: 400 (European part, as *Halictus vestitus* LEPELETIER de SAINT-FARGEAU).

**D i s t r i b u t i o n**: Russia (Astrakhan Prov., Kalmykia Rep., Dagestan Rep., Crimea Rep.). – Cyprus, Turkey, Iran, Afghanistan, Central Asia, Mongolia, NW China.

***Halictus (Vestitohalictus) radoszkovskii* (VACHAL, 1902)**

**M a t e r i a l e x a m i n e d**: Dagestan Rep., 9 km SSE Kochubey, 21-22.VII.2015, M. Proshchalykin, 8♀♀, 5♂♂.

**D i s t r i b u t i o n**: \*Russia (Dagestan Rep.). – Armenia (BLÜTHGEN 1923), Turkmenistan (VACHAL 1902), Uzbekistan (FRIESE 1916), Iran, Afghanistan (EBMER 1974, 1978).

***Halictus (Vestitohalictus) tectus* RADOSZKOWSKI, 1876**

Material examined (134♀, 29♂): Rostov Prov.: 60 km E Rostov-na-Donu; Rostov-na-Donu; Persyanovka; Bagaevskiy; Volgograd Prov.: Sarepta[Volgograd]; Elton Lake; 18 km NNE Kalach-na-Donu; Astrakhan Prov.: Dosang; Krasnopeschanny; Baskunchak Lake; Kharabali; Volzhskiy; Promyslovoye; 13 km S Liman; 35 km NNE Astrakhan; Kalmykia Rep.: Tsagan-Nur Lake; 20 km SW Tsagan-Aman; 16 km E Khulkhuta; 17 km SSW Artezian; 3 km SE Idzhil; 10 km SEE Ketchenery; 4 km NE Yashkul'; Crimea Rep.: Aleshki, Kholmy, Sudak, Torkhokut.

Published records: NIKIFORUK 1957: 148 (Bashkortostan Rep., as *Halictus vestitus*); PESENKO 1972: 293 (Rostov Prov., as *H. vestitus*).

Distribution: Russia (south of European part, South Ural). – Southern and Middle Europe (from southern France in the west), Caucasus.

***Halictus (Vestitohalictus) tuberculatus* BLÜTHGEN, 1925**

Material examined: Saratov Prov.: Vol'sk, no date, Skurikhina, ♂; Rostov Prov.: 60 km E Rostov-na-Donu, 7.VIII.1970, Yu. Pesenko, 60♂♂; Persyanovka, 50 km NE Rostov-na-Donu, 30.VII.1971, Yu. Pesenko, ♀; Volgograd Prov.: 6 km SW Kamyshyn, 10.VII.2015, M. Proshchalykin, ♂; Kalmykia Rep.: 10 km SEE Ketchenery, 13-14.VII.2015, M. Proshchalykin, ♂; Crimea Rep.: Kholmy, 8-18.VII.1904, D. Glazunov, 12♂♂.

Published records: BLÜTHGEN 1955: 20 (Crimea Rep., Krasnodar Terr., Stavropol Terr.).

Distribution: Russia (south of European part). – Ukraine, Armenia, Turkey, Israel, Syria.

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### Zusammenfassung

Als Ergänzung zur bisher publizierten Kenntnis russischer *Halictus*-Arten, werden weitere 17 selten gesammelte beziehungsweise wenig bekannte Arten der Untergattungen *Seladonia* und *Vestitohalictus* aus dem europäischen Teil Russlands vorgestellt. Somit sind derzeit 58 Spezies der Gattung *Halictus* aus Russland bekannt, einschließlich *H. (Vestitohalictus) radoszkovskii* (VACHAL, 1902), welche erstmalig für Russland bekannt wurde.

## References

ANAN'YEVA S.I. & S.I. KOCHETKOV (1999): The fauna of Hymenoptera Aculeata in the Ryazan province. — In: ANAN'YEVA S.I. (ed.), The fauna and ecology of animals. A collection of scientific reports of the Zoological society of the Ryazan state pedagogical university: 4-12. (In Russian).

BLAGOVESHCHENSKAYA N.N. & L.M. POPOVA (1994): A catalogue of the fauna of bees (Hymenoptera, Apoidea) in the Ulyanovsk province. — In: ISAYEV A.Yu. (ed.), Nature of the Ulyanovsk Province. No. 5. Insects of the Ulyanovsk Province. — Ulyanovsk Branch of the Moscow State University, Ulyanovsk, 94-116. (In Russian).

BLÜTHGEN P. (1923): Beiträge zur Kenntnis der Bienengattung *Halictus* LATR. — Archiv Naturgeschichte (A) **89** (5): 232-332.

BLÜTHGEN P. (1955): The Halictinae (Hymen., Apoidea) of Israel. I. Genus *Halictus* (subgenera *Halictus* s.str. and *Thrincohalictus*). — Bulletin of the Research Council of Israel (B) **5** (1): 5-23.

DATHE H.H. (1980): Zur Hymenopterenfauna des Naturschutzgebietes Teberda im Westkaukasus. — Milu, **5** (1-2): 194-217.

EBMER A.W. (1974): Beiträge zur Kenntnis der Fauna Afghanistans. *Halictus* LATR. et *Lasioglossum* CURT., Halictidae, Apoidea, Hymenoptera. — Casopis Moravského Musea **59**: 183-210.

EBMER A.W. (1975): Neue westpaläarktische Halictidae (Halictinae, Apoidea), Teil II. — Die Gruppe des *Halictus (Vestitohalictus) mucoreus* (Ev.). — Mitteilungen aus dem zoologischen Museum in Berlin **51** (2): 161-177.

EBMER A.W. (1978): *Halictus*, *Lasioglossum*, *Rophites* und *Systropha* aus dem Iran (Halictidae, Apoidea) sowie neue Arten aus der Paläarktis. — Linzer Biologische Beiträge **10** (1): 1-109.

EBMER A.W. (1988a): Die europäischen Arten der Gattungen *Halictus* LATREILLE 1804 und *Lasioglossum* CURTIS 1833 mit illustrierten Bestimmungstabellen (Insecta: Hymenoptera: Apoidea: Halictidae: Halictinae). 2 — Die Untergattung *Seladonia* ROBERTSON 1918. — Senckenbergiana Biologica **68** (4-6): 323-375.

EBMER A.W. (1988b): Kritische Liste der nicht-parasitischen Halictidae Österreichs mit Berücksichtigung aller mitteleuropäischen Arten (Insecta: Hymenoptera: Apoidea: Halictidae). — Linzer Biologische Beiträge **20** (2): 527-711.

EBMER A.W. (2005): Zur Bienenfauna der Mongolei. Die Arten der Gattungen *Halictus* LATR. und *Lasioglossum* CURT. (Insecta: Hymenoptera: Apoidea: Halictidae: Halictinae). — Linzer Biologische Beiträge **37** (1): 343-392.

ELFVING R. (1968): Die Bienen Finnlands. — Fauna Flora Fennica **21**: 1-69.

EVERSMANN E. (1852): Fauna hymenopterologica volgo-uralensis (Continuatio). — Bulletin de la Société Impériale Naturalistes de Moscou **25** (3): 3-137.

FRIESE H. (1916): Die Formen des *Halictus quadricinctus* F., sowie einige neue *Halictus* Arten der paläarktischen Region (Hym.). — Deutsche Entomologische Zeitschrift **1916** (1): 25-34.

KUZNETSOVA V.T. (1990): The Hymenoptera of the «Galich'ya Gora» Nature Reserve. Informational Report. — All-Union Institute for Information in Science and Technology of the Academy of Sciences of the USSR, Moscow, 85 pp. (In Russian).

LEVCHENKO T.V. (2014): Contributions to the fauna of bees (Hymenoptera, Apoidea) of Moscow Province. 5. Family Halictidae (excluding *Lasioglossum* s. l.). — Eversmannia **40**: 18-40. (In Russian).

LEVCHENKO T.V. & G.I. YUFEREV (2013): Additions and corrections to the checklist of bees (Hymenoptera: Apoidea: Apoformes) of the Kirov Province. — Trudy Gosudarstvennogo prirodnogo zapovednika "Nurgush" **2**: 99-108. (In Russian).

MICHENER C.D. (2007): The Bees of the World [2nd Edition]. — Johns Hopkins University Press, Baltimore, xvi+[i]+953 pp. + 20 pls.

MORAWITZ F.F. (1869): Die Bienen des Gouvernements von St. Petersburg. — Horae Societatis Entomologicae Rossicae, **6** (2): 27-71.

MORAWITZ F.F. (1874): Die Bienen Daghestans. — Horae Societatis Entomologicae Rossicae, **10** (2-4): 129-189.

NIKIFORUK K.S. (1957): Bees of the Bashkir ASSR. — Zapiski Bashkirskogo Filiala Geographicheskogo Obshchestva SSSR **1**: 139-162. (In Russian).

NIU Z.Q., WU Y.R. & D.W. HUANG (2004): A taxonomic study on the subgenus *Seladonia* (Hymenoptera, Halictidae, *Halictus*) in China with description of one new species. — *Zoological Studies* **43** (4): 647-670.

OSYTSCHNIUK A.Z., PANFILOV D.V. & A.A. PONOMAREVA (1978): Superfamily Apoidea. — In: MEDVEDEV G.S. (ed.), Key to the Insects of the European Part of the USSR. Vol. **III**, Pt 1. — Nauka, Leningrad, 279-519. (In Russian).

PAULY A., DEVALEZ J., SONET G., NAGY Z.T. & J.-L. BOEVE (2015): DNA barcoding and male genital morphology reveal five new cryptic species in the West Palearctic bee *Seladonia smaragdula* (VACHAL, 1895) (Hymenoptera: Apoidea: Halictidae). — *Zootaxa*, **4034** (2): 257-290.

PESENKO Yu.A. (1972): Contributions to the fauna and ecology of bees (Hymenoptera, Apoidea) in steppes of the Lower Don basin. Report II. The family Halictidae. — *Entomologicheskoe obozrenie* **51** (2): 282-295. (In Russian).

PESENKO Yu.A. (1984): The taxonomy of bees of the genus *Halictus* LATREILLE (Hymenoptera, Halictidae) with description of the 7<sup>th</sup> and 8<sup>th</sup> metasomal sterna of males: subgenus *Platyhalictus*. — *Trudy Zoologicheskogo Instituta Akademii Nauk SSSR* **128**: 33-48. (In Russian).

PESENKO Yu.A. (1985): The taxonomy of bees of the genus *Halictus* LATREILLE (Hymenoptera, Halictidae) with description of the 7<sup>th</sup> and 8<sup>th</sup> metasomal sterna of males: subgenus *Monilapis*. — *Trudy Zoologicheskogo Instituta Akademii Nauk SSSR* **132**: 77-105. (In Russian).

PESENKO Yu.A. (1986): The taxonomy of bees of the genus *Halictus* LATREILLE (Hymenoptera, Halictidae) with description of the 7<sup>th</sup> and 8<sup>th</sup> metasomal sterna of males: subgenus *Tythalictus*. — *Entomologicheskoe obozrenie* **65** (3): 618-632. (In Russian).

PESENKO Yu.A. (2006): Contributions to the halictid fauna of the Eastern Palaearctic Region: genus *Seladonia* ROBERTSON (Hymenoptera: Halictidae, Halictinae). — *Esakia* **46**: 53-82.

PESENKO Yu.A. (2007): Subfamily Halictinae. — In: LELEJ A.S. (ed.), Key to the insects of Russian Far East. Vol. **IV**. Pt 5. — Dal'nauka, Vladivostok, 824-878. (In Russian).

PESENKO Yu.A., BANASZAK J., RADCHENKO V.G. & T. CIERZNIAK (2000): Bees of the Family Halictidae (excluding *Sphecodes*) of Poland: Taxonomy, Ecology, Bionomics. — Bydgoszcz Pedagogical University, Bydgoszcz, 348 pp.

PROSHCHALYKIN M.Yu. & Yu.V. ASTAFUROVA (2012): Halictid bees (Hymenoptera, Apoidea: Halictidae) of Ukraine: fauna and zonal distribution. — A.I. Kurentsov's Annual Memorial Meetings **23**: 93-113. (In Russian).

PROSHCHALYKIN M.Yu. & Yu.V. ASTAFUROVA (2016): The species-group names of bees (Hymenoptera: Apoidea, Apiformes) described from Crimea, North Caucasus, European part of Russia and Ural. Part I. Families Colletidae and Halictidae. — Far Eastern Entomologist **312**: 1-20.

RUCHIN A.B. & S.V. SHIBAYEV (2008): Contributions to the fauna of bees (Hymenoptera, Apoidea) of Mordovia Republic. — Sovremennaya ekologiya — nauka XXI veka. — RGU, Ryazan', 335-341. (In Russian).

SEDYKH K.F. (1974): The animal world of the Komi ASSR. Invertebrates. — Book Publishing House of the Komi Republic, Syktyvkar, 191 pp. (In Russian).

SHIBAEV S.V. & O.A. POLUMORDVINOV (2012): A review of species diversity of hymenoptera (Insecta, Hymenoptera) in Penza region. — Izvestiya Penzenskogo gosudarstvennogo pedagogicheskogo universiteta imeni V. G. Belinskogo **29**: 274-279. (In Russian).

SITDIKOV A.A. (1986): The fauna of bees (Hymenoptera, Apoidea) of Udmurtia, with description of *Melitta udumurtica* sp.n. — Trudy Zoologicheskogo Instituta Akademii Nauk SSSR **159**: 103-112. (In Russian).

STRAND E. (1909): Die paläarktischen *Halictus*-Arten des kgl. zoolog. Museums zu Berlin; z. T. nach Bestimmungen von J. D. Alfken. — Archiv Naturgeschichte (A) **75** (1): 1-62.

VACHAL J. (1902): *Halictus* nouveaux ou litigieux de la collection Radoszkowski (Hymenoptera, Apidae). — Russkoye Entomologicheskoe Obozreniye **2** (4): 225-231.

WARNCKE K. (1982): Beitrag zur Bienenfauna des Iran 14. — Die Gattung *Halictus* LATR., mit Bemerkungen über bekannte und neue *Halictus*-Arten in der Westpaläarktis und Zentralasien. — Bollettino del Museo Civico di Storia Naturale de Venezia **32**: 67-166.

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